DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: <u>04-0120F4</u>

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: <u>69.28</u>

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary

Address: 333 Burma Road

Report No: WIR-002448

Date Inspected: 27-Apr-2008

City: Oakland, CA 94607

Project Name:SAS SuperstructureOSM Arrival Time:2330Prime Contractor:American Bridge/Fluor Enterprises, a JVOSM Departure Time:730

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

Bridge No: 34-0006 Component: Tower and OBG Fabrication

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

CWI Inspector: Mr. Xu Le Feng

Orthotropic Box Girder (OBG) and Tower Fabrication:

New Tower Shop Bay 1

The QA Inspector observed ZPMC welder Ms. Chen Hong Xia stencil 40460 is using welding procedure specification WPS-B-T-2221-B-L3C-S to make submerged arc groove weld SSDI_SA16-FG-112B, -111, -109B, -004, -007B, -009 -005B and -002. American Bridge/Fluor QA representative Mr. Wu Jian Bo informed the QA Inspector that the reason for having multiple weld numbers is because this single plate that contains the weld is going to be cut into smaller plates, and each of these smaller plates have specific weld numbers. The QA Inspector observed a welding current of approximately 670 amps, 34.0 volts, a travel speed of 620 mm per hour, and the base material appears to be between 110°C and 230°C. See the photograph below for additional information. Items observed by the QA Inspector appear to comply with project specifications.

WELDING INSPECTION REPORT

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Earlier in the day ZPMC presented Caltrans QA personnel with a "Notification of witness inspection" document 00267 that states BP139-001-013 through -024 along with five other base and end plates will be available for magnetic inspection in bay four for a period of approximately 24 hours. Around midnight, the QA Inspector performed a visual inspection of bay four and observed the plates containing these welds are could not be located as a result of them being removed from bay four to another location.



Summary of Conversations:

See above for summary of conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer